Hameiri, S. (2014) Avian influenza, 'viral sovereignty', and the politics of health security in Indonesia. The Pacific Review, 27 (3). pp. 333-356.

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Avian Influenza, 'Viral Sovereignty', and the Politics of Health Security in Indonesia[1]

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Abstract

In December 2006, Indonesian Health Minister, Siti Fadilah Supari, shocked the world when announcing her government would no longer be sharing samples of the H5N1 avian flu virus, collected from Indonesian patients, with the World Health Organization, at a time when global fears of a deadly influenza pandemic were running high. For observers of Southeast Asian politics, the decision reinforced the view of the region as made up of states determined to protect their national sovereignty, at almost all costs. This established view of the region, however, generally neglects the variable and selective manner in which sovereignty has been invoked by Southeast Asian governments, or parts thereof, and fails to identify the conditions shaping the deployment of sovereignty. In this article, it is argued that Siti's action was designed to harness claims of sovereignty to a domestic political struggle. It was a response to the growing fragmentation and, in some cases, denationalisation of the governance apparatus dealing with public health in Indonesia, along with the 'securitisation' of H5N1 internationally. The examination of the virus-sharing dispute demonstrates that in Southeast Asia sovereignty is not so much the *ends* of government action, but the *means* utilised by government actors for advancing particular political goals.

[1] The final version of this article is published in *The Pacific Review* 27, no. 3 (2014), pp. 333-56. Funding for this project has been generously provided by an Australian Research Council grant DP110100425.

Introduction

In December 2006, then Indonesian Health Minister, Siti Fadilah Supari, shocked the world when announcing her government would no longer be sharing samples of the H5N1 highly pathogenic avian influenza (HPAI) virus, collected from Indonesian patients, with the World Health Organization (WHO). The decision disrupted the longstanding Global Influenza Surveillance Network (GISN) – the WHO-coordinated international regime for managing seasonal and pandemic influenza – at a time when global fears of a deadly H5N1 pandemic in humans were running very high. GISN was premised on countries sharing virus specimens freely with the WHO, which then sent them to reference laboratories for assessment. The specimens ultimately ended up in the hands of pharmaceutical companies, which produced vaccines and sold these back to governments at a profit. Controversially, Siti claimed Indonesian sovereignty over viruses collected within Indonesia. She further justified her action by arguing that GISN was deeply unfair towards developing countries and that the governments and populations of these countries, because of their sovereign right over 'their' viruses, were entitled to a greater share of the benefits from the production of vaccines made with these viruses. Horrified international observers accused Siti of undermining global health security for narrow national interests (e.g. Holbrooke and Garrett 2008; Fidler 2007a). The virus-sharing dispute led to an intense period of international negotiations, concluding in May 2011 with the ratification of a new agreement by the World Health Assembly (WHA).

For many seasoned observers of Southeast Asian politics, Siti's decision was no shock at all, as it seemed to fit the broader picture of a region dedicated to the preservation of national sovereignty, at almost all costs. A near-consensus exists in the literature that the region's states are highly resistant to encroachments on their national sovereignty. The norm of non-interference in the domestic affairs of other states, also known as the 'ASEAN Way', is seen by many to be an almost sacred principle in the region (Acharya 2009; Haacke 2003;

Leifer 1989; Narine 2006). Growing economic interdependence, along with the emergence or worsening of a range of trans-boundary, 'non-traditional' security (NTS) issues in recent decades – infectious disease, environmental degradation, climate change, transnational crime, and Islamist terrorism – are seen to have tested this commitment. But most observers nevertheless concur that the region's preference for harder, 'Westphalian', forms of national sovereignty has been maintained, even in the face of serious transnational threats, whose amelioration necessitates coordinated international action (Caballero-Anthony 2005, 2008; Acharya 2009; Maier-Knapp 2011; Stevenson and Cooper 2009; Kamradt-Scott and Lee 2011).

Yet, a closer inspection of the response to H5N1 in Indonesia suggests that this established view of the region cannot fully explain Siti's actions. In fact, Indonesian 'sovereignty' in health governance had already been considerably undermined beforehand, and significant interventions persisted even after the virus-sharing dispute. While Siti's refusal to share human viruses received much attention, it is striking that the sharing of H5N1 viruses from poultry with the Food and Agriculture Organization (FAO) had never ceased, while the cooperation between WHO and Indonesian health officials within Indonesia was generally also unaffected. Furthermore, massive internationally funded interventions, to facilitate better local capacity for surveillance of and response to outbreaks, have been implemented in subnational animal and human health services.

What this mixed picture, in which intervention and non-intervention are both present, demonstrates is that rather than the Indonesian government's dedication to protecting national sovereignty *explaining* the virus-sharing dispute, it is Siti's invocation of sovereignty that actually needs to be *explained*. Scholars' insistence on characterising the Southeast Asian region in terms of states' dedication to Westphalian sovereignty risks neglecting important developments occurring underneath the surface of inter-state relations that could explain the

usage of sovereignty by governments. So rather than being assumed away, Siti's move needs to be situated within the broader contemporary contestation over power and resources shaping state-society relations, as well as the very nature of statehood, in Indonesia.

The starting point for this analysis is to recognise the political, contested and potentially shifting nature of sovereignty 'regimes' – the historically specific arrangements regularising patterns of intervention and non-intervention in a region, or worldwide (see Agnew 2009). Rather than an end in itself, sovereignty is better understood as 'a strategic tool to define the scope of political conflict, to determine which forces are included within a particular struggle for power' (Jones 2012: 16). As in many initially unstable postcolonial states, Southeast Asian governments have for decades used sovereignty and 'national security' selectively as a means of protecting their preferred domestic social and political orders. In ASEAN, this was mainly directed during the Cold War at shoring up fledgling capitalist regimes, by preventing communist challengers within from joining forces with counterparts across borders. In the post-Cold War era, and especially since the Asian crisis, however, the region's sovereignty regime has been far less coherent, reflecting rising intra-elite divisions and the effects of globalisation (Jones 2012). Assertions of national sovereignty are now made by different parts of the state, at different times, in different contexts, for different purposes, and at times at cross-purposes. Indeed, the social and political orders that sovereignty assertions are meant to support have not remained static in Southeast Asia, and neither has the region's sovereignty regime. Therefore, the ends served by the use of sovereignty in the region should not be presupposed, but rather its mobilisation in particular contexts deserves explanation.

Specifically, I argue that Siti's action was designed to harness claims of sovereignty to a domestic political struggle, but the scope of 'domestic' politics, in relation to public health issues, has significantly changed over the past decade. The virus-sharing ban was a

response to the growing fragmentation and, in some cases, denationalisation of the governance apparatus dealing with public health in Indonesia, along with the 'securitisation' of H5N1 internationally. The fragmentation of Indonesia's health governance has sucked authority and funding out of the Ministry of Health (MoH) in Jakarta, already relatively weak vis-à-vis other government departments, rendering it one of many organisations vying for influence and funding in the management of infectious disease. The securitisation of H5N1 internationally provided the opportunity for this power grab, by raising the perceived stakes associated with mismanaging the disease and making considerable amounts of international funding available (Elbe 2010).

Viewed in this way, Siti's decision to withhold viruses, citing national sovereignty, represents one of many positions in a complex struggle over power and resources, played out through contestation over the appropriate governance arrangements through which transnational problems, like H5N1, should be dealt with. It was essentially an attempt to reassert control over public health agendas and funding, not by tackling domestic opponents head-on – too difficult an undertaking for the MoH, particularly when powerful interests relating to agribusiness and livestock industries were involved – but by shifting the conflict to an intergovernmental arena. At the WHO, the MoH was the sole Indonesian representative, and the adjustments it sought in GISN would have made it a key player in the management of future international funds relating to vaccine production and attendant benefits. Siti's sovereignty assertion also had the effect of muscling out the MoH's main rival for supremacy within Indonesian infectious disease surveillance and research networks – the United States Naval Area Medical Research Unit No. 2 (NAMRU-2). This recentralisation attempt had a particular ideological appeal to Siti – an ardent supporter of Sukarno-style anti-imperialism and *Pancasila.*

I follow by looking at the broader context of health governance in Indonesia today, to identify the factors that promoted and constrained Siti's power-grab. I then demonstrate that Siti's invocation of sovereignty was not simply a reaction to international intervention in Indonesia's domestic affairs, by showing the extent to which encroachments on Indonesian sovereignty had already occurred prior to the virus-sharing dispute, including with MoH complicity. Finally, I will analyse of the politics of 'viral sovereignty'.

The notable example of the virus-sharing dispute shows that sovereignty is a means used by governmental actors to advance particular political goals. It also highlights the need to pay greater attention than the literature currently affords to the changing domestic context shaping the conditions in which sovereignty is mobilised by Southeast Asian governments, particularly the implications of the emergence of increasingly fragmented and transnationally penetrated states.

The fragmentation of health governance in Indonesia

The governance arrangements associated with the management of public health in Indonesia have fragmented considerably over the preceding decade or so. Particularly in the area of infectious disease surveillance and response, we now see a wide range of state and non-state agencies jostling for turf and funding from domestic and international sources. In this context, as the virus-sharing case demonstrates, sovereignty claims are becoming less coherent too – not so much attached to an overarching national agenda but reflecting specific contestations over authority and control of resources, involving government ministries or sections thereof and associated societal interests.

The fragmentation of Indonesia's health governance apparatus is a result of two interrelated processes. The first is the emergence of more regulatory global health governance. This process is primarily reflected in, but in fact precedes, the arrival of the

WHO's revised 2005 International Health Regulations (IHRs), which came into force in 2007. The second process is the significant decentralisation of government in Indonesia from 2001. These processes have rendered the MoH one of many agencies vying for funding and authority within a fragmented and partly transnationalised Indonesian health governance system. This context, as we shall see in the following sections, explains both the MoH's mobilisation of sovereignty and its support for international intervention. I discuss the two processes below.

Regulatory global health governance

According to Fidler (2007b), we are witnessing a tentative shift from what he calls 'Westphalian' *international* health governance to 'post-Westphalian' *global* health governance. This is particularly reflected in the changing nature of the IHRs. The now-defunct 1969 IHRs focused on the management of international contact-points – airports, border-crossings and ports – and only required governments to notify the WHO of outbreaks of six infectious diseases – cholera, the plague, relapsing fever, smallpox, typhus and yellow fever – while the WHO was obliged to rely only on information provided by governments. The 2003 SARS outbreak proved a watershed moment in the transformation of international health governance. In particular, the Chinese government's initial cover-up of the outbreaks and subsequent refusal to cooperate with the WHO was seen to have allowed the pathogen to spread, reaching as far as Toronto within days (Fidler 2003). The international response to SARS saw the WHO take on new coordinating capacities vis-à-vis governments, as well as issue unilateral travel warnings unlike ever before (Kamradt-Scott 2011). While some tentative steps towards a less 'state-centric' system were already evident in WHA Resolution 54.14 (2001), following the outbreak WHA Resolution 56.28 (2003) was unanimously passed, calling for the IHRs to be revised, and describing the then existing IHRs as

'inadequate', in failing to specify the responsibilities of states and the WHO when outbreaks occur (Davies 2012: 593).

The revised IHRs place a greater focus on the quality and capacities of *domestic* health systems in the management of infectious disease for the broader benefit of global health security, specifying the competences states need to have to be prepared for epidemics. They also provide the WHO with the authority to obtain information from nongovernmental sources and declare a Public Health Emergency of International Concern (PHEIC) (Kamradt-Scott 2011). Unlike their predecessors, the revised IHRs do not attempt to specify which infectious diseases could be designated as PHEIC, giving the WHO discretionary powers on the basis of information from the field.

The emergence of regulatory global health governance has coincided with the trend for the 'securitisation' of infectious disease (Davies 2008; Elbe 2009; McInnes and Lee 2006). Many now note that some public health issues, mainly rapidly spreading infectious diseases, have come to be seen as 'pressing existential threats that require urgent and extraordinary international policy responses', thus 'abandoning the decades-old convention of equating security with the absence of armed conflict between states' (Elbe 2009: 2). The securitisation of infectious disease has undoubtedly led to an increasing emphasis upon, and rising funding allocated by the governments of richer countries towards, programs aimed at improving the capacities of developing countries for surveillance of and response to emerging infectious diseases (Calain 2007; Smith 2012; Lakoff 2008).

For example, in the international effort to combat H5N1 more than $2 billion were in 2006 pledged by donors, such as the US, European Union, Japan and Australia (Scoones 2010). As a result, substantial funds were spent in countries where outbreaks had occurred, approximately $130 million of which in Indonesia – the hardest-hit country (Forster 2010: 131). That such significant amounts were allocated to combat a disease that at that point had

only killed a relatively small number of humans was a direct result of the tendency to treat H5N1 as a pressing security problem with a particularly devastating potential (Elbe 2010; see Davis 2005).

The fragmentation of Indonesian health governance promoted by these trends was further exacerbated by the growing concern among public health experts and epidemiologists with the risk of zoonoses – pathogens crossing the species boundary from animals to humans. Zoonoses are believed to account for about 60 per cent of all emerging infectious diseases between 1940 and 2004 (Scoones 2010: 3), including the main recent outbreaks of SARS, H5N1, H1N1 ('swine flu'), the Nipah virus and the Hendra virus. The result has been not only increasingly close cooperation between international organisations such as the WHO, FAO, the World Organisation for Animal Health (OIE) and the World Bank, as reflected in the 'One World, One Health' agenda (FAO et al. 2008), but also the incorporation of a dazzling range of governmental and nongovernmental agencies within countries like Indonesia into the effort to combat infectious diseases. Since preventing pandemics is seen to require capacity for surveillance and response in wild, domestic and livestock animals, and as the incidence of zoonoses is arguably affected by issues like climate change and deforestation, the scope of what constitutes 'domestic health governance' in relation to infectious disease management has expanded dramatically in recent years (see Coker et al. 2011). This expansion has also had the effect of giving powerful interests associated with livestock and other agribusiness industries a strong stake in the way that some infectious diseases are managed (Vu 2011).

Within Indonesia, therefore, managing infectious diseases is no longer the sole purview of the Directorate-General of Disease Control within the MoH – the lead agency under the old IHRs. Tellingly, the scope of that office has expanded to include 'environmental health' and a new sub-departmental unit specialising in zoonoses was

established with the explicit objective of coordinating activities with other government departments, mainly in the Ministry of Agriculture (MoA). But in a reflection of the multitude of interests and forms of expertise now attached to controlling infectious diseases, following the H5N1 outbreaks the Indonesian government set up the National Committee for Avian Influenza (*Komnas FBPI*) in 2006 and more recently the National Committee for Zoonoses (*Komnas Zoonosis*). *Komnas FBPI*, disbanded in early 2010, was a ministerial-level committee led by the Coordinating Ministry for People's Welfare. It also included the ministers for health, agriculture, forestry, national planning, and industry, the Coordinating Minister for Economics, the commander of the armed forces, the police chief, and the chair of the Indonesian Red Cross. It had a secretariat led by the Vice-Minister of Agriculture and six task-forces, involving scientists and other experts, meant to provide direction on research and development, animal health, human health, vaccine and anti-viral medicines, and mass communications and public information (Forster 2010: 145). Individual ministries retained their control of operating budgets, however, and also in most cases maintained independent relationships with international funding bodies.

On top of this, many nongovernmental organisations (NGOs) have also been funded to participate, mainly in surveillance and communication activities. For example, NGO the Center for Indonesian Veterinary Analytical Studies (CIVAS) was donor-funded to conduct research into the incidence of H5N1 along the poultry production and marketing chain.

Decentralisation and health governance in Indonesia

Further driving the fragmentation of health governance in Indonesia has been the process of government decentralisation. In Indonesia, decentralisation was adopted under international pressure in the early post-Suharto era by the weak Habibie government and implemented from 2001 (Hadiz 2010: 23). It represented a radical break from the pre-existing highly

centralised authoritarian order. Indonesia's decentralisation laws devolve many previously centrally located responsibilities and resources to the district (*kabupaten*) or more rarely to provincial levels of government. In particular, a substantial proportion of tax revenue now flows to, and is managed at, the district level. In most cases, however, rather than promote neoliberal 'good governance' – government accountability, transparency and efficient use of public monies – as it was purported to do, decentralisation has empowered local predatory politico-business interests now posing as democratic leaders or defenders of particular ethnic groups and traditions (Hadiz 2010). Many of these local elites were ironically nurtured earlier by the highly centralised New Order regime. These well-placed elites were able to capture the benefits of decentralisation for themselves and their supporters, marginalising opponents through various means, including 'money politics' and the use of violence and intimidation. Instead of reducing corruption by making governance participatory, decentralisation has markedly increased corruption at the local level and made it very unpredictable compared with the Suharto era. Corrupt practices have in many cases become a crucial component of contests over control of local state apparatuses and associated resources, as well as for maintaining localised predatory patronage networks, upon which political power often depends (Hadiz 2010: 36-38).

The decentralisation of government has had two major implications in the context of infectious disease management. First, international donors have had to develop multilevel governance approaches to counter the fragmenting tendencies of Indonesia's decentralisation. Indeed, as one FAO official in Jakarta recounts, 'The central government has little or no outreach. We therefore work though *Dinas* [local government department] locally' (Interview 2011a). This has led to the emergence of new governance networks, connecting particular units within government departments across various levels in the service of managing specific public health concerns, with donors acting as coordinators. Second, those seeking to

deflect the scrutiny associated with the international response to infectious diseases have often done so by keeping governance at the district or province levels and in the hands of local officials (Charnoz and Forster 2011). On the other hand, key Jakarta ministries, which now often find themselves powerless vis-à-vis lower levels of government, have selectively attempted to harness activities related to the management of H5N1 and other infectious diseases in order to bolster the territorial and functional reach of their authority. They have also sought to blame decentralisation for their failures in managing H5N1. Siti, for example, argued:

> Vietnam, as a centralised socialist country, can get high compliance on national policies and so has succeeded, for example, in implementing rapid culling of birds… In contrast, Indonesia is in transition towards a decentralized democracy after three decades of authoritarian national rule. We are still on a learning curve, and compliance of the relatively independent regional authorities with national policies is often poor (Butler 2007).

The fragmentation of Indonesia's health governance I describe is essential to understand to make sense of Siti's power-grab in the virus-sharing dispute and her use of national sovereignty. This is in terms of the motivation for this action, its objectives and the constraints on its achievements. In the next section, I develop my argument by demonstrating that Siti's actions cannot be explained simply as part of an overarching preference in Indonesian government for protecting national sovereignty. This is because considerable interventions associated with the management of H5N1 had existed before and during the virus-sharing dispute, including with MoH complicity.

International intervention in the governance of H5N1 in Indonesia

Siti Fadilah Supari's decision to discontinue the sharing of H5N1 specimens with the WHO is typically viewed as a reassertion of Indonesian sovereignty over the WHO's supranational authority. It is often argued that following a brief 'post-Westphalian' moment, resulting from the SARS shock, states have reasserted their national sovereignty over the WHO's supranational authority, with detrimental consequences to global efforts to deal with the threat of infectious disease (Calain 2007; Stevenson and Cooper 2009; Kamradt-Scott 2011; Smith 2012). Siti's virus-sharing dispute is viewed as the most significant manifestation of this nationalist backlash, as she was seen to challenge even her country's basic responsibility to cooperate with the WHO (Fidler 2010).

Indeed, Southeast Asia as a whole is often viewed as a region of states particularly determined to uphold their national sovereignty against external intervention. A key tenet of the now-famous concept, 'the ASEAN Way', is the commitment of governments in the region to refrain from interference in the domestic matters of member-states (see Acharya 2009). In health governance, Southeast Asian states' perceived failure to cooperate in managing trans-boundary infectious diseases has been blamed on this apparently outdated commitment to 'Westphalian' national sovereignty (Caballero-Anthony 2008; Maier-Knapp 2011).

By contrast, I argue that the virus-sharing ban was not simply a reassertion of national sovereignty against rising supranational authority. It was rather a strategic attempt to recentralise authority and funding within the MoH, after much of it had leaked out as a result of the fragmentation of health governance in Indonesia, in a context in which large amounts of funding were available internationally due to H5N1's securitisation. The MoH was too weak to directly challenge many of its domestic rivals – particularly when backed by powerful interests from the poultry industry. It therefore sought to strengthen its deteriorating position by appropriating more funding from international sources through the selective use of national sovereignty. I demonstrate this claim in two steps. In this section, I show that the

pursuit of sovereignty *per se* cannot explain Siti's actions, as significant interventions designed to improve local surveillance of and response to H5N1 infections in animals and humans were evident simultaneously with the virus-sharing dispute, including with MoH support. In the following, I examine the specific context in which 'viral sovereignty' claims were made by focusing on the ousting of NAMRU-2 from Indonesia, a key aspect of the virus-sharing ban imposed by Siti. The example of NAMRU-2, at the time the most advanced research lab of its kind in Indonesia, clearly shows that the MoH's assertions of sovereignty were motivated by a concern for strengthening the relative position of the ministry within Indonesia's fragmented and partly transnationalised health governance terrain..

While Siti's virus-sharing controversy grabbed world headlines, considerable international interventions into the governance of H5N1 in Indonesia persisted and even intensified. Specifically, large-scale international projects – the Participatory Disease Surveillance and Response (PDSR) and District Surveillance Officer (DSO) programs, managed by the Jakarta offices of the FAO and WHO respectively – were deployed to provide better surveillance of, and response, to H5N1 outbreaks at the local level. In developing and implementing these projects, the FAO and WHO partnered with, and received active support from, the MoA and MoH. The persistence of these interventions, even as the virus-sharing dispute was unfolding, demonstrates that there was more to Siti's decision than protecting Indonesian national sovereignty.

Below, I briefly describe PDSR and DSO. As we shall see, both programs manifested deep and multilayered interventions into the governance of H5N1 in Indonesia, by seeking to create animal and human health services at the local level, where these were often absent or severely underfunded, and by creating new functional networks connecting several levels of government in Indonesia in the service of combating H5N1.

The Participatory Disease Surveillance and Response program

PDSR is the single largest H5N1-related international project in Indonesia, with a budget between 2005 and 2011 of nearly $55 million. Contemporarily, although the project officially exists, its much-reduced funding reflects the declining sense of urgency attached to H5N1 worldwide. To give a sense of the scale of the program at its peak:

> From January 2006 to September 2008, PDSR teams, comprising over 2,000 trained veterinarians and para-veterinarians, conducted over 177,300 surveillance visits, detected 6,011 outbreaks of avian influenza in 324 districts, and met with over two million poultry farmers and community members… The program's size is also reflected in the number of central staff positions involved. In May 2009, there were 15 international and 60 national staff/consultants employed by FAO, with a majority of them supporting the PDSR programme (Charnoz and Forster 2011: 69).

PDSR officers, trained by FAO and OIE, are tasked with conducting passive and active surveillance of poultry illness in their area of responsibility, as well as village information campaigns. They are expected to develop relationships of trust with villagers, so that the latter would be willing to report suspicious chicken deaths. When there is reasonable concern of an outbreak, PDSR officers report to the Local Disease Control Centre (LDCC), which is tasked with investigating and responding. PDSR is coordinated by the Campaign Management Unit (CMU) – a designated office within the MoA's Directorate-General of Livestock Services. FAO consultants played a key role in designing the CMU and maintain a regular presence within the unit.

PDSR was reportedly foisted upon the FAO, mainly by the American government (see Charnoz and Forster 2011: 81). Its objectives, however, were also premised on the central government's National Strategic Work Plan (NSWP), in which 'backyard' poultry

was identified as a key priority. Donors essentially accepted the emphasis on backyard poultry, although supporting evidence was absent. As a result, PDSR was entirely focused on backyard poultry until late 2008 (Perry et al. 2009: 29). Furthermore, the program was explicitly developed as a means of building the capacity of district animal health services at a time of perceived emergency – a service which was usually under-funded and often non-existent. Because of decentralisation, PDSR's planners viewed direct engagement at the local level as essential. Indeed, in reflection of the tenacious struggles between local and national elites over control of rents from agricultural and livestock industries, the line of authority from the central MoA to local agricultural *Dinas* has in most cases broken down completely. The implementation of PDSR created new functional networks connecting the national CMU and local offices, with a specific focus on managing H5N1.

As long as PDSR remained focused on the backyard sector it was described as an 'iconic success' (Perry et al. 2009: 26), and cooperation with governments at all levels was very good. But since the program began to be partly reorientated towards the commercial sector from late 2008, as evidence of the disease's circulation in farms began to accumulate and due to the recommendations of a 2009 external review, results have been very modest, and cooperation, particularly with local governments, began to break down (Charnoz and Forster 2011). A pilot project was developed within PDSR, conducted in only six layer farms, to develop cost-effective bio-security measures. It aimed to establish trust with industry so that farmers would allow vets to visit when outbreaks occur in farms, as well as build the capacity of local vets to profile the commercial poultry industry in their area. Participation was entirely voluntary, however, and farmers were unenthusiastic. Engagement with broiler farms was not even attempted, as PDSR officials assessed the chances of success there to be exceptionally low. This is because vaccinating broiler chickens is practically impossible and

Indonesian farmers have rejected large-scale culling, with local governments siding with farmers and the central MoA declining to force the issue.

The District Surveillance Officer program

While the implementation of the large-scale PDSR program already demonstrates that the virus-sharing dispute cannot be explained in terms of a blanket reassertion of Indonesian sovereignty, the DSO program shows that even the MoH under Siti's leadership was not averse to supporting substantial external intervention in the governance of H5N1 in Indonesia, thus raising the question addressed in the following section of why sovereignty was invoked by the MoH in relation to virus-sharing.

The USAID-funded DSO program was modelled on PDSR and was meant to work alongside PDSR surveillance teams on the ground (Perry et al. 2009: 22; USAID 2008: 11). It operated on a much smaller scale, however – in 8 provinces and just over 90 districts particularly prone to H5N1 outbreaks, compared with PDSR's 29 provinces and thousands of villages. Like PDSR, the DSO program increased the capacity of both the WHO and the central government, the MoH in this case, to monitor local infectious disease outbreaks and intervene if necessary. A senior MoH bureaucrat described DSO as the 'focal point of central government surveillance' (Indriyono 2011). DSOs were meant to maintain regular surveillance at the local level, not only of H5N1 outbreaks, but also other infectious diseases. From the MoH's perspective the program's utility was not in reasserting central leadership over local health *Dinas* offices, which remain generally intact, but in increasing central MoH involvement in the management of H5N1 in poultry at the district level. The program allowed the MoH to increase its capacity to operate locally, with MoH and WHO representatives present in the investigation of outbreaks in poultry, even when human infections were not immediately observed. That the same program also improved the WHO's own surveillance of

H5N1 infections in Indonesia was not seen as an issue by MoH officials in this case and sovereignty concerns were not raised.

Indeed, rather than ousting the WHO and other donors when launching the virus-sharing dispute, the MoH appeared quite eager to increase their involvement, albeit in ways that bolstered its relative strength vis-à-vis other actors vying for authority and funding in infectious disease governance. As Davies (2012) shows through empirical analysis, notwithstanding Siti's firebrand rhetoric, the Indonesian MoH reported to the WHO, whether formally or informally, nearly all H5N1 outbreaks during the virus-sharing crisis and cooperation between the MoH and the WHO domestically did not break down. A 2008 USAID report, at the height of the virus-sharing crisis, noted, for example, that a 'well-established and close working relationship appears to exist between the Indonesian MOH and the WHO in Indonesia' (USAID 2008: 13). This observation was also confirmed to this author by several top-level interviewees from MoH and WHO in Jakarta in late 2011.

The politics of 'viral sovereignty'

That such large-scale and intrusive interventions in the governance of H5N1 in Indonesia coincided with Siti's decision to withhold virus samples does not support the claim that the virus-sharing dispute was about the protection of Indonesian national sovereignty. It is rather my argument that the invocation of sovereignty by the MoH in this case was a strategic move to recentralise authority and funding, in a context of highly fragmented health governance in Indonesia, within which the MoH was increasingly marginalised.

But before we examine the MoH's deployment of sovereignty, it is essential first to evaluate two other potential explanations for Siti's actions, which go beyond the simplistic notion that it was a typical Indonesian assertion of national sovereignty: (a) that Siti's decision reflected her personal beliefs and somewhat erratic personality; and (b) that it was a

reaction to the international securitisation of H5N1. Both offer useful, but partial, insights into the virus-sharing dispute and Siti's claims of 'viral sovereignty'.

To be sure, the virus-sharing dispute sat well with Siti's unquestionable personal preference for the ideology of anti-imperialism and self-reliance espoused by Indonesia's first President, Sukarno – an ideology instrumental in the formation of the Non-Aligned Movement at the 1955 Bandung Asia-Africa Conference and the subsequent emergence of the 'ASEAN Way' (Acharya 2009: 54-55). It also sat well with Siti's proclivity for conspiracy theories, involving the US government in particular (Lowe 2010: 161). For example, in a book written at the height of the virus-sharing dispute, Siti (2008: 34) proclaimed:

> Was this the neo-colonialism predicted by Soekarno, the first President of Indonesia, 50 years ago, when the incapability or the powerlessness of a nation can be the source of prosperity for other nation? Was the sharing of influenza viruses with the WHO, which had been implemented since 1952 under the control of the Global Influenza Surveillance Network (GISN) also implied the same scheme?

This rhetoric also found many supporters in Indonesia and other developing countries, making Siti a popular public figure – unusual for an Indonesian Health Minister. Nonetheless, Siti's nationalism is not enough in itself to explain her actions, as it would then be difficult to account for the MoH's promotion of the DSO program at the same time. Clearly, the MoH, under Siti's leadership, was not entirely averse to international intervention to manage H5N1, and to WHO involvement specifically.

Another explanation, provided most explicitly by Stefan Elbe (2010; also Forster 2010; Calain 2007), is that Siti was reacting to the 'securitisation' of H5N1 by the WHO and Western governments:

> As fear about the threat of a possible human H5N1 pandemic spread across the world, many governments scrambled to stockpile anti-viral medications and vaccines, albeit in a context where there was insufficient global supply to meet such a rapid surge in demand. Realizing that they were the likely 'losers' in this international race, some developing countries began to openly question the benefits of maintaining existing forms of international health cooperation (Elbe 2010: 476).

In other words, Siti is seen to have acted unilaterally because the securitisation of H5N1 made the disease a matter of *national* security for the governments of other states, which also acted unilaterally to protect their own citizens. Securitisation is therefore seen to have simultaneously brought the inequality inherent in GISN into sharp relief and provided opportunities for the Indonesian government to exploit the world's fear of a H5N1 pandemic.

There is considerable merit in this argument. Note, for example, Siti's (2008: 55) own words: 'What were the benefits to Indonesia [of having the most virulent strain of H5N1]? Bargaining power! Yes, stronger bargaining power? Thank God.' There is also strong evidence to suggest the virus-sharing dispute was opportunistic, rather than motivated by genuine concern for the effects of H5N1 on Indonesians' health. Even at the height of the crisis in 2006 and 2007, the central government only devoted an average of $57 million, or 1.7 per cent of the health budget, to controlling H5N1 (Curley and Herington 2011: 157). Health officials interviewed also insisted H5N1 was not a particular priority. One high-level MoH bureaucrat stated: 'We have so many diseases – all of the diseases are a priority' (Interview 2011b). Another explained that the Indonesian government submitted a list of health needs every year to the international community, but in the case of H5N1, 'usually other governments [were] the ones who express they have the intention to help' (Indriyono 2011). And when the perceived sense of crisis attached to H5N1 dissipated worldwide, the

Indonesian government was very quick to drop the issue. When interviewed by the author, Emil Agustiono, the public servant given charge of the secretariat of the government's new *Komnas Zoonosis*, cut a lonely figure. Without budget or staff, Emil (2011) lamented, 'I wish the pandemic will come again'.

Yet, while observers like Elbe have tended to focus on the *international* bargaining power provided by the securitisation of H5N1 to Indonesia, they have neglected for the most part to investigate its *domestic* significance (Curley and Herington 2011), and perhaps more importantly, the domestic context in which Siti's decision was made. It is the interaction between the securitisation of H5N1, which led to substantial funds being made available to combat the disease internationally, with the fragmented and partly transnationalised Indonesian health governance system that has shaped Siti's resort to 'viral sovereignty'.

The crucial factor shaping the MoH's behaviour in the response to the H5N1 crisis, and its usage of sovereignty specifically, has been the ministry's weakness vis-à-vis the MoA and local governments, resulting from its lack of powerful societal support-bases. In Indonesia, political power tends to be in the hands of predatory politico-business elites that rely on 'money politics' to fund systems of patronage that support their authority (Robison and Hadiz 2004). Thus, the MoA became a particularly important ministry in the pre-decentralisation era, because it was responsible for regulating the lucrative agribusiness and livestock sectors. The formal and informal rents generated from these sectors, and the associated dispensation of licences to Suharto cronies, played an important part in the maintenance of the authoritarian New Order regime (see Robison 1986). After decentralisation, much of this authority was devolved to the districts and therefore conflicts between local and national authorities over control of benefits from these industries have become common and quite intense at times (Hadiz 2010). Poultry industry conglomerates have been able to exploit this competition by encouraging local officials to resist national

directives when these were detrimental to their commercial interests (Curley and Herington 2011: 157; Charnoz and Forster 2011). At the same time, maintaining good relations with the MoA has remained important to big poultry producers operating in Indonesia and the large operators in the sector reportedly enjoy a close relationship with the ministry (Charnoz and Forster 2011: 90).

In contrast, the MoH generally lacks links to powerful societal groups, as the activities it regulates and funds do not generate significant rent-seeking opportunities. While this has meant that the line of authority connecting the national MoH and local health *Dinas*, despite the devolution of approximately 80 per cent of the health budget, has not broken down in the same way as in agriculture, the MoH's leverage within government and vis-à-vis powerful interests in society is typically quite weak. The MoH's lack of powerful societal support-bases has made it particularly reliant on international funding for strengthening its relative position within Indonesian health governance, meaning it was particularly vulnerable to the effects of international funding leaking away to other parts of the state or to non-state actors.

The international effort to combat H5N1 has comprised two primary governance agendas, with different implications for the response within Indonesia, and for the MoH's use of sovereignty specifically. First, because H5N1 is a zoonosis that initially develops in poultry, programs, like PDSR and DSO, have been developed to provide surveillance of outbreaks in poultry, and response where possible, as well as identify its mechanisms of zoonotic transmission through surveillance of human cases at the source. Second, efforts have been made to study the avian flu virus and develop a vaccine (see Scoones and Forster 2010).

In Indonesia, international funding was mainly funnelled into activities relating to the first agenda (see Lowe 2010), with the MoH finding itself marginalised for two main reasons. First, because H5N1 has not become easily transmissible between humans to-date, most international funding was directed into surveillance of and response to outbreaks in poultry. I

already mentioned in this respect that while the PDSR program was rolled out in 29 provinces, its human health equivalent, the DSO program, was only implemented in eight. Second, the international emphasis on managing infections in poultry saw tensions rise between the MoH and MoA, leading to struggles over which would be the lead agency in managing the Indonesian response to H5N1. Due to its lack of powerful societal support-bases, the MoH was in most cases the loser in these struggles, although most policymakers and practitioners viewed it as the more competent of the two ministries (Ear 2012: 181). In one prominent example, the Agriculture bureaucracy managed to assume the lead role, despite MoH resistance, in the administration of poultry culling, a practice to which the MoA was antagonistic (Curley and Herington 2011: 159). As a result, culling was only seldom deployed in Indonesia to manage H5N1, even though it was the preferred policy response of the OIE, FAO and WHO (see Scoones and Forster 2010). By most accounts, the MoA assumed this stance because of strong resistance from the Indonesian poultry industry, which exerted considerable influence on decision-making in the ministry (Charnoz and Forster 2011: 91). In fact, the poultry industry was so influential within the MoA that when Indonesia's Director of Animal Health, Dr Tri Satya Putri Naipospos, told the media of the existence of H5N1 in Indonesian poultry she immediately lost her job (Lowe 2010: 169)!

In the absence of similar links to powerful interests, the MoH had to rely to a greater extent on international pressure and funding to increase its authority in the domestic governance of H5N1, particularly at the local level. A top-level MoH official explains: 'We can advocate and convince them [local governments], or we can provide funding... Pandemic preparedness has helped the centre have a bit more control over provinces and districts – particularly if we have the money' (Indriyono 2011). This money, typically, came from external sources. This explains why the MoH did not use sovereignty to deny the

implementation of surveillance and response programs like DSO that had the potential of enhancing its control over local governments.

By contrast, the MoH repeatedly raised sovereignty concerns in relation to activities associated with the second global agenda of developing a vaccine for humans. This was to marginalise competing medical research networks within Indonesia, centred primarily on the US Naval Area Medical Research Unit No. 2 (NAMRU-2), and position the MoH to be the main recipient in Indonesia of potential benefits from vaccine production, both directly in the form of funding for research and development, and indirectly through royalties. Below I focus on the MoH's ousting of NAMRU-2 as a particularly useful manifestation of the link between the invocation of sovereignty and the MoH's attempt to strengthen its relative positioning within Indonesian health governance.

The virus-sharing dispute and the expulsion of NAMRU-2 from Indonesia

Before the virus-sharing dispute, the MoH benefited relatively little from the considerable sums spent internationally on studying the H5N1 virus and developing a vaccine. Lowe (2010: 154) writes: 'At the start of the Indonesian outbreak in 2003, Indonesia did not have a molecular biology laboratory capable of identifying the composition of biological samples suspected to be H5N1 influenza virus.' Subsequent to the outbreaks, some international funding became available to support lab improvement. But advanced research and development activities were generally carried out by the WHO reference laboratory in Hong Kong and the US Centers for Disease Control and Prevention (CDC) lab in Atlanta. Meanwhile, Indonesia's leading laboratory – the MoH's National Institute of Health Research and Development (NIHRD) – was mostly focused on H5N1 detection and confirmation in virus samples. Even after the outbreaks international funding to the NIHRD lab was limited. By 2008, total CDC contribution was only $2 million (USAID 2008: 10).

By contrast, the US Navy's NAMRU-2 enjoyed far better funding, mainly from various US government sources, and at the time of the outbreaks operated 'a regional "reference lab" for influenza virus testing' (Lowe 2010: 154). Based in Jakarta since 1991, in 2006 NAMRU-2 staff numbered 175, of which only 19 were American. There were 44 Indonesian scientists employed in NAMRU-2, many of whom among the country's best-qualified (Ear 2012: 167). In the fiscal year 2006, at the height of the avian flu scare, NAMRU-2 received a total of $11 million, $2.6 million of which was special funding dedicated to avian and pandemic influenza surveillance (NAS 2007: 208). Operating the expensive device used to run simultaneous testing of human respiratory pathogens alone cost NAMRU-2 more than $1 million annually (NAS 2007: 64).

In 2006, as a prelude to the virus-sharing ban, Siti accused NAMRU-2 of espionage and violation of Indonesian sovereignty, saying it sent H5N1 specimens out of Indonesia without notifying or seeking permission from the MoH. She also publicly speculated that the samples were being turned into biological weapons in a secret US government facility in Los Alamos (Siti 2008). Siti ordered NAMRU-2's closure in 2008 and it was finally shut down in April 2010.

To understand why NAMRU-2 became a target for Siti, it is essential to understand the extent to which it was embedded within Indonesia's health governance system, and central to alternative surveillance networks that operated beyond the MoH's control. NAMRU-2's significance and authority, relative to the MoH, only increased as a result of the urgency attached to the response to H5N1.

While there is no evidence to support Siti's biological weapons allegation, NAMRU-2 was undoubtedly a prominent node in a health governance network operating within Indonesia that was not answerable to the Health Minister (NAS 2007: 69). In the course of the decade prior to its closure, the unit's main purpose had shifted, not without internal resistance,

from conducting research on tropical illnesses to disease surveillance, reflecting the growing concern worldwide with emerging infectious diseases (Lowe 2010: 157). In effect, funding for NAMRU-2 supported 'a parallel ILI [influenza-like illness] surveillance system' (USAID 2008: 10). Because of its superior funding, NAMRU-2 had a deep reach into Indonesia's provinces, often better than the MoH's, and conducted considerable independent research on infectious diseases, including H5N1. A USAID (2008: 11) report thus notes: 'Through these ILI surveillance systems NAMRU has managed to establish very productive relationships with key hospitals throughout Indonesia.' For example, before the virus-sharing ban in 2006 NAMRU-2 was receiving information regarding H5N1 outbreaks ahead of the MoH, which it then forwarded to the CDC, bypassing the MoH. This, according to a review of NAMRU-2's operations, 'created a delicate situation' (NAS 2007: 72). Furthermore, the expensive equipment NAMRU-2 operated was not available to the Indonesian government. It remained Navy-owned and was not to be 'left behind should the influenza surveillance budget be severely curtailed' (NAS 2007: 71).

Crucially, NAMRU-2 was not a foreign organ within Indonesia. As mentioned, most of the scientists employed in NAMRU-2 were Indonesian and it was deeply embedded within Indonesian medical research networks (NAS 2007: 74). In the time before the outbreaks, NIHRD and NAMRU-2 staff enjoyed very close relations and often cooperated on particular projects or informally. Notable researchers would often move between the NIHRD or Eijkman Institute and NAMRU-2. Indeed, Endang Rahayu Sedyaningsih, Siti's successor as health minister and a former Director of the Centre of Biomedical Research and Program Development at the NIHRD, was previously a NAMRU-2 researcher and had close personal relations with its staff (*Jakarta Post*, 2 May 2012).

The appointment in October 2009 of Endang, a world-class medical researcher with a Harvard PhD, to the role of Health Minister was seen by many to renew 'confidence in the

rational-legal basis of policymaking in the ministry' (Ear 2012: 178). It was also criticised by some, including Siti herself, who accused Endang of collaborating with NAMRU-2 behind her back when she was minister (*Jakarta Post*, 2 May 2012; *Jakarta Globe*, 24 October 2012). Many speculated at the time that Endang would allow NAMRU-2 back into Indonesia and the MoH would resume virus-sharing with the WHO. But, contrary to expectations, Endang refused to reopen NAMRU-2 and maintained the virus-sharing ban until the conclusion of the new international agreement in May 2011. That Endang stuck to the policies of the much-maligned Siti, against the expectations of many observers, shows that the motivations for the virus-sharing ban run deeper than the personal preferences of an individual health minister.

In line with the broader argument of this article, the expulsion of NAMRU-2 must be looked at in relation to the particular context of Indonesian health governance, against the backdrop of the global H5N1 crisis. In essence, NAMRU-2 competed directly with the MoH for authority, and ultimately funding from international sources, but was vulnerable to the MoH's assertions of sovereignty in a way that the MoA was not. Dennis Normile (quoted in Ear 2012), writing in *Science* magazine, was thus correct to predict that NAMRU-2 would 'fall victim to Indonesia's determination to develop its own research capabilities and take control of its H5N1 viral samples.' But 'Indonesia', as we have seen, is not a monolith. The strategy emanated from the MoH for specific reasons, associated with its relative weakness.

There is evidence to suggest that even before the virus-sharing dispute Siti was keen for Indonesian government labs to move up the 'food chain', because she was angry at a WHO statement in May 2006 that the first human-to-human transmission might have occurred in Indonesia and was hoping genetic testing would prove her right (Smith 2012: 74). And, indeed, the assertion of 'viral sovereignty' has paid handsome dividends to MoH-affiliated research labs in Indonesia, at the expense of alternative centres of medical research.

While discussions of a new civilian joint Indonesia-US Center for Biomedical Research and Public Health have not yielded tangible results at the time of writing, the NIHRD's National Influenza Center is currently being developed as a new WHO Collaborating Centre, specialising in zoonotic influenza. This means significant upgrades to its capacity and equipment (*Jakarta Post*, 4 October 2011). Furthermore, if before the virus-sharing dispute NAMRU-2 and NIHRD were the only labs capable of H5N1 detection, in 2007 the MoH designated 44 laboratories around Indonesia as centres for H5N1 diagnosis, with the NIHRD and Eijkman Institute in Jakarta as main referral labs (Setiawaty 2012: 210). For this the NIHRD received substantial funding from several donors to purchase expensive diagnosis and detection equipment. It also received lab resources and ongoing capacity building support from the WHO (Setiawaty 2012: 210). Importantly, these labs are nationally controlled, not an insignificant outcome in the decentralisation era.

The virus-sharing dispute was also used to attract funding from both international sources and other parts of the Indonesian government for vaccine production in Indonesia. The government-owned pharmaceutical company PT Bio Farma, which produces routine immunisations, has recently expanded its operations to produce both seasonal and avian flu vaccines (Lowe 2010: 158). Prior to the H5N1 outbreaks, Indonesians were small consumers of seasonal flu vaccine and vaccine production capacity was very low in the country as a result. In the new international framework for managing influenza that replaced GISN expanding developing countries' seasonal flu vaccine production is seen as essential for increasing world production capacity in preparedness for the surge in output required to meet rising needs in case of pandemics (Kamradt-Scott and Lee 2011). But because global pharmaceutical companies were concerned to ensure the new agreement did not undermine the protection of intellectual property rights (see Smith 2012), they agreed to cooperate with developing country producers and provide them with technological knowhow. Japanese

manufacturer Biken thus entered into partnership with Bio Farma in 2007 to help the latter develop its flu vaccine production capacity. Aside from seasonal vaccine production, several institutions, including the MoH, have been engaged, with funding from the Indonesian Ministry of Research and Technology, in an effort to develop a H5N1 vaccine to also be produced by Bio Farma. It was recently estimated that a locally made vaccine could be widely available in 2013 (*Jakarta Post*, 27 January 2012).

In summary, the MoH was too weak to claim a greater share of the international funding for H5N1 mitigation programs in Indonesia from domestic rivals. As a result, MoH officials, including health ministers Siti and Endang, sought to deploy national sovereignty as a way of securing funding to research and surveillance activities that the MoH could dominate.

Conclusion

When Siti Fadilah Supari claimed 'viral sovereignty' over specimens of the deadly H5N1 avian influenza virus collected in Indonesia, this was seen by many observers to confirm the widely accepted view of Southeast Asia as a region of states dedicated to the preservation of hard forms of 'Westphalian' sovereignty, even in the face of serious transnational threats. I have argued that sovereignty should be seen not as the *ends* of state action, but as a *means* available to government actors in the pursuit of particular political goals. In this case, the deployment of 'viral sovereignty' was a generally successful attempt at recentralising authority and funding within the central MoH. Prior to Siti's launching of the virus-sharing dispute, the MoH, an already relatively weak ministry, was further weakened by the leakage of funding to other state and non-state agencies as a result of the emergence of a more diffuse and regulatory global health governance terrain and the advance of government decentralisation within Indonesia.

Echoing likeminded work (Jones 2012), this article has endeavoured to show that the task for future research is identifying the precise circumstances in which claims for national sovereignty are made in Southeast Asia, as well as the circumstances in which interventions are allowed, or even encouraged, by governments. The insistence on characterising the region's states in terms of their dedication to Westphalian sovereignty risks ignoring or downplaying the significance of very important developments occurring just underneath that surface and which offer a more accurate reading of the region's political dynamics.

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